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SIMULTANEOUS IMAGING AND PRECISION ALIGNMENT OF TWO MMWAVE ANTENNAS BASED ON POLARIZATION-SELECTIVE MACHINE-VISION

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Abstract

A system and method for imaging and aligning antennas that includes an overlay imaging aligner composed of two or more antennas in association with a polarization gate, a polarization beam splitter, a non-polarizing beam splitter, a beam dump, one or more imaging lens and a common detector array. The overlay imaging aligner aligns the antennas by overlaying simultaneous digital images associated with the antennas on the common detector array. The antennas can be, for example, mm Wave antennas, waveguides, etc. The detector array generates real-time digital images the antennas. Such an approach of simultaneous imaging leverages the spatial resolution of digital optical imaging to aligning antenna components.

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References

- 12-010Application

Status of Availability

This invention is available for licensing exclusively or non-exclusively in any field of use.

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